

ABSTRACT

The invention concerns a bidirectional actuator comprising at least a stator structure excited by an electric coil, and a mobile magnet in a main gap, the stator structure consists of two pairs of stator poles (1 to 4), each of the pairs of poles being enclosed by a least an electric coil, the stator structure defining at least a first auxiliary gap (6, 8) for the displacement of the mobile magnet (14) relatively to a first degree of freedom, and a second auxiliary gap (7, 9) for the displacement of the magnet (14) relatively to a second degree of freedom.